

## DEPARTMENT OF ATHLETICS AND PHYSICAL EDUCATION

### ADMINISTRATION

Alan E. Gantert, director

### COURSES

The courses and fees described in this catalog are subject to change or cancellation at any time by official action of Cornell University. For current fee information on physical education courses, call 255-4286; for outdoor education courses, call 255-6183 or visit [www.coe.cornell.edu](http://www.coe.cornell.edu).

Enrollment in any course is limited by the space available. Other restrictions are included in the course description. Most courses are coeducational. The specific time and place of class meetings, as well as information about fees, are available at the physical education course registration or may be found on "Bear Access," a package of software for accessing a variety of network services at Cornell. Course fees are billed through the Office of the Bursar.

Additional course offerings may be listed at registration, as the curriculum is frequently reviewed and changed. Drop deadlines for outdoor education courses are earlier than university deadlines, and often earlier than physical education deadlines. Cornell Outdoor Education (COE) courses may be added any time by calling 255-6183, or registering at [www.coe.cornell.edu](http://www.coe.cornell.edu).

### Aquatic Courses

#### PE 1100 Swimming, Beginning

Fall, spring, and summer (six weeks). Instruction and practice in skills leading to passing the basic swimming proficiency test.

#### PE 1101 Swimming, Advanced Beginning

Spring. Ideal for all who have taken one semester of Beginning Swimming, regardless of whether the test was successfully completed. Areas of special emphasis are the crawl stroke and rotary breathing, back crawl, elementary backstroke, diving, treading water, and underwater swimming. The primary objective is to strengthen the student's confidence and competence.

#### PE 1102 Swimming, Intermediate

Fall and spring. Practice of basic skills and five basic strokes: front crawl, back crawl, elementary backstroke, breaststroke, sidestroke.

#### PE 1103 Swimming, Advanced

Fall and spring. Practice of nine strokes: front crawl, back crawl, elementary backstroke, breaststroke, inverted breaststroke, sidestroke, overarm sidestroke, trudgeon, and butterfly.

#### PE 1104 Swimming Conditioning

Fall and spring. Prerequisite: reasonable swimming ability. Introduction to, and practice of, different training methods. Final objective: to swim 2,500 yards during class period. Primarily a conditioning and not an instructional course.

#### PE 1105 Springboard Diving

Fall and spring. Introduction on the safe and effective use of a diving board to and practice of the five basic dives: forward dive, back dive, inward dive, reverse dive, and 1/2 twist dive.

#### PE 1110 Lifeguard Training

Fall and spring. Fee charged. Prerequisite: swimming test consisting of 500 yards, demonstrating three strokes, treading water without the use of hands, and retrieving a brick from 7 feet of water. Three classes per week.

American Red Cross certification course. Practice and execution of lifeguarding first aid and CPR skills and techniques. Certification is awarded in lifeguarding, first aid, O<sub>2</sub>, AED, and CPR upon satisfactory completion of the course.

#### PE 1111 Lifeguard Training Instructor

Spring. Fee charged. Prerequisites: current Red Cross ICT or instructor card, written and skill tests in lifeguarding, first aid, and CPR techniques. Students must not miss first class. 2 classes a week.

American Red Cross lifeguarding instructor and CPR-FPR certifications are awarded upon successful completion.

#### PE 1120 Water Safety Instructor

Spring. Fee charged. Prerequisite: passing of written and skill water tests given on first day.

American Red Cross water safety instructor certification is awarded upon satisfactory completion of the course. This is not a course for a casual participant. Approximately 45 hours of work is required.

#### PE 1130 Scuba, Open-Water

Fall, spring, and summer (six weeks). Fee charged.

Program includes classroom work, skill training in a pool, and open-water training in Cayuga Lake. P.A.D.I. open-water certification awarded upon successful completion.

#### PE 1131 Scuba, Advanced Open-Water

Fall and spring. For those who have completed open-water course. Fee charged. Advanced-level open-water training in Cayuga Lake.

#### PE 1132 Rescue Diver

Fall and spring. For those who have completed Advanced Open-Water Scuba certification. Fee charged.

Advanced course for scuba divers interested in learning rescue and safety techniques.

#### PE 1133 Dive Master

Fall and spring. Open only to those who have completed Rescue Diver course. Fee charged.

Advanced-level scuba course. Note: This is a long, time-consuming course, which requires the student to be in good physical and swimming shape.

#### PE 1134 Scuba Diving Trips

Spring, offered during spring intersession period. Fee charged.

Scuba trips to various destinations such as the Bahamas. Locations change from year to year. See the information sheet at the registration table.

#### PE 1135 Specialty Scuba Diving

Fall and spring. Fee charged. Courses offered in the following specialty diving areas: navigation, search and recovery, night diving, deep diving, underwater photography, wreck, multi-level, boat, tropical fish identification and buoyancy control, and underwater naturalist.

### Bowling Courses

#### PE 1300 Bowling

Fall and spring. Fee includes shoe rental. For the beginning and intermediate bowler.

#### PE 1301 Intermediate Bowling

Fall and spring. Fee charged. For players with previous bowling experience (e.g., bowling classes, YABA, tournament). Skills emphasized are timing, balance, and release.

### Dance Courses

Develop flexibility, coordination, and the ability to perceive and reproduce phrases of dance movement with rhythmic accuracy, clarity of body design, and fullness of feeling. Auditions are required for admission to all advanced courses, since they require the mental and physical ability to perform more complex phrases in various styles.

#### PE 1150 Ballroom Dancing

Fall, spring, and summer. Fee charged. Students and their partners must sign up at course registration.

Includes instruction in the waltz, swing, cha cha, calypso, tango, and others.

#### PE 1151 Intensive Ballroom Dance

Fall and spring. Fee charged. Ballroom Intensive class examines three social dance styles in depth each semester. The course is geared to students who enjoy a challenge, and who are seeking more depth and breadth than offered in a survey course. No dance experience is necessary to enroll; the basics are covered each semester.

#### PE 1155 Belly Dancing I

Fall and spring. Fee charged. Belly dancing is an exciting Middle Eastern folk art that can help in the development of flexibility, body awareness, and overall body tone. The class begins with warm-ups and continues with basic movements and rhythms, then puts them together in a dance to music of the Middle East.

**PE 1156 Belly Dancing II**

Spring. Fee charged.

Advanced belly dance movements and combinations that include putting basic and advanced movements to the Beledi, Masmouodi, and Karsilma dance rhythms of the Middle East. A drum solo, taqsim (fluid, graceful movements of the arms and hands), floor work (level changes with the dance), and techniques in playing finger cymbals are also a part of this class.

**PE 1160 Latin Dance**

Fall and spring. Fee charged.

Partner sign-in required. This is an introductory course that teaches salsa, mambo, Latin, and meringue. Emphasis on listening, feeling, and expressing Latin rhythms with precise detail and technique.

**PE 1161 Latin-Israeli Dance**

Fall and spring.

Covers some of the hundreds of dances that make up Latin-Israeli dancing and the thousands of dances that make up Israeli dancing, with a clear emphasis on the dances of the past 10 years.

**PE 1162 Intermediate Salsa and Rueda de Casino Dance**

Fall and spring. Prerequisite: Latin Dance or permission of instructor.

The first half of the course will concentrate on more complex open step patterns and partnered and non-partnered combinations. The second will transition into a "Dancing Wheel."

**PE 1165 International Ethnic Dance**

Fall and spring.

This class covers the popular traditional dances from around the world, including line, circle, partner and individual forms. Now is your chance to move to the exotic beats from the Balkans and Near East, whirl to Scandinavian tunes, sway with sultry Latin American sounds, swing to historic and contemporary American folk rhythms, and much more. No experience or partner necessary.

**PE 1166 Spanish Folk Dance**

Fall and spring.

The Sevillanas is danced in pairs—man and woman or two women. It is a popular dance mainly at fairs and festivals and it is the dance usually taught first when learning the Flamenco.

**PE 1167 Introduction to Tango**

Fall and spring.

Introduction to the fundamentals of Tango dancing and its origins. Focus is on movement on the dance floor and how to be connected to your partner. Other aspects include learning to differentiate between the genres of Tango music (Tango, Milonga, Candombe, and Vals).

**PE 1170 Introduction to Swing Dance**

Fall and spring. Fee charged.

No partners are needed. Beginners can expect to develop significant capacity for enjoyment of two forms of swing dance: jitterbug and street boogie. Partners are rotated throughout the course. Effort are made at registration to equalize male and female ratios.

**PE 1171 Swing Dance II**

Fall and spring. Fee charged.

For those who have taken the introductory course.

**PE 1172 Swing Dance III**

Spring. Fee charged.

A solid Lindy Hop I & II sequence in the tradition of Frankie Manning and Steven Mitchell (includes Intermediate Charleston, Jazz, and Fast Lindy). Dancing more deeply into the music, styling for leaders and followers, improvisation skills. Partner recommended, but not necessary.

**PE 1180 Dance Technique I (also THETR 1240)**

Fall and spring.

**PE 1181 Exploration in Movement and Performance (also DANCE 2410)**

Fall and spring.

**PE 1182 Dance Technique II (Classical) (also DANCE 2210)**

Fall and spring.

**PE 1183 Dance Technique II (Modern) (also DANCE 2220)**

Fall and spring.

**PE 1184 Dance Technique III (Classical) (also DANCE 2310)**

Fall and spring.

**PE 1185 Dance Technique III (Modern) (also DANCE 2320)**

Fall and spring.

**PE 1186 Dance Technique IV (Classical) (also DANCE 2410)**

Fall and spring.

**PE 1187 Dance Technique IV (Modern) (also DANCE 2420)**

Fall and spring.

**PE 1188 Dance Technique Workshop (also DANCE 2240)**

Fall and spring.

**PE 1189 Hip Hop Hollywood (also DANCE 2430)**

Fall and spring.

**PE 1190 Indian Dance (also DANCE 1320)**

Fall and spring.

**First Aid/CPR Courses****PE 1202 Certified First Responder**

Fall. Fee charged.

CFR is an intensive 52-hour course that requires studying and examinations. Course includes training in basic patient assessment, CPR for the Professional Rescuer, and automatic external defibrillation, oxygen administration, basic airway management, bleeding control, and spinal immobilization. Students will qualify for the New York State CFR Certification Exam upon successful completion of the course.

**PE 1203 NYS EMT Refresher**

Spring. Fee charged.

EMT-B refresher is an intensive course that will renew your certification upon successful completion of all NYS DOH requirements. Students will have the opportunity to challenge the NYS Practical Skills Examination and the course written examination at the beginning of the class. All students must pass a CPR for the Professional Rescuer course within the class. To complete the class and renew certification, students must also pass the NYS Practical Skills Examination and the NYS written examination.

**PE 1210 NYS Emergency Medical Technician—Basic**

Two-semester course. Fee charged.

Intensive 130-hour course taught throughout both the fall and spring semesters. Includes training in CPR for the Professional Rescuer, oxygen administration, airway management, fracture management, bleeding control, expanded patient assessment, spinal immobilization, medical anti-shock trousers, and defibrillation. Students qualify for the NYS EMT Certification Exam upon successful completion of this course. Rigid attendance and participation requirements are strictly enforced.

**PE 1211 NYS Emergency Medical Technician—Critical Care**

Two-semester course. Prerequisite: current certification as NYS EMT. Fee charged.

Intensive 160-hour course taught throughout both fall and spring semesters. Includes training in CPR for the Professional Rescuer, oxygen administration, airway management, fracture management, bleeding control, expanded patient assessment, spinal immobilization, medical anti-shock trousers, manual defibrillation, EKG interpretation, pharmacology, and IV administration. Clinical rotations, in the field and hospital, are also required. Students qualify for the New York State AEMT-CRITICAL CARE certification exam upon successful completion of the course. Attendance and participation requirements are strictly enforced.

**Fishing Courses****PE 1310 Introduction to Freshwater Angling**

Fall. Fee charged.

Acquaints the student with freshwater spinning, casting, and fly fishing equipment; tackle; and techniques through on-the-water experiences. It also seeks to promote an awareness of the angling opportunities that exist close to Cornell and in the Finger Lakes region of New York. The course consists of an orientation and outings to various locations around the area such as Cayuga Lake and the Susquehanna River.

**PE 1311 Fly Fishing and Basic Fly-Tying Techniques**

Fall and spring. Fee charged.

Learn the art of tying several of your own artificial flies while you learn the art of fly casting. Students must have a valid NYS fishing license and their own wader boots. All other materials provided.

**Fitness Courses****PE 1230 Cardio Combo**

Fall, spring, and summer (six weeks). Fee charged.

Dance program designed to keep the cardiovascular system in top shape by making the body demand increased amounts of oxygen.

**PE 1231 Aerobic Instructor**

Fall. Fee charged.

Helps prepare the student to teach aerobics and prepares them for the AFAA Primary Aerobic Instructor or Step Certification. Topics include the theory behind all basic components of a good class, applications, and practical uses in the class settings.

**PE 1232 Aerobic Instructor Apprentice**

Spring. Fee charged. Prerequisite: Aerobic Instructor course.

This class is a necessary component to finishing the Aerobic Instructor certification.

**PE 1233 Bootcamp**

Fall and spring. Fee charged.

Designed as a modern military-style workout program with an emphasis on both aerobic and anaerobic fitness.

**PE 1235 8 O'Clock Rock**

Fall and spring. Fee charged.

Combines the best of the principles of weight training and cardio training.

**PE 1240 Pilates Mat Work**

Fall and spring. Fee charged.

Conditioning program designed to increase body awareness, improve alignment and breathing, and build endurance, flexibility, coordination, and strength through a highly focused flow of movement.

**PE 1245 Spinning**

Fall and spring. Fee charged.

Indoor stationary cycling class that combines basic cycling movements with motivational coaching, breathing awareness, and heart rate training.

**PE 1260 Cardio Kickboxing**

Fall and spring. Fee charged.

Cardio kickboxing is a series of movements that consists of kicks, punches, and blocks done to music. It is similar to a typical aerobics class except the moves consist of martial arts techniques.

**PE 1261 Fitness and Conditioning**

Fall and spring.

Physical fitness program that embodies features of stretching exercises, weight lifting, and jogging. Students work on their individual training needs.

**PE 1262 Fitness for Women**

Fall and spring.

Includes both lecture and physical activity. Students are presented with a variety of topics and information that involves physical fitness and health. Each student will learn to design a fitness program that is geared toward her own interests and abilities. Topics include: nutrition, time management, relaxation techniques, and stress management. Activities will include aerobic dance, walking, jogging, weight training, flexibility exercises, relaxation and stress management routines, and yoga techniques.

**PE 1265 Wellness and Fitness**

Fall and spring. Fee charged.

"Here's to a Healthier You"—a wellness experience for the busy student. This course assesses the student's physical fitness status, blood-cholesterol levels, and overall lifestyle health habits. Each student receives an individual exercise prescription and has access to the Wellness Program fitness room in Helen Newman Hall. Lectures on nutrition and stress management are also presented. This course has been made possible through the generosity of the Bateman family in memory of Ms. Dorothy Bateman, Cornell's first director of women's sports and physical education (1920 to 1962).

**PE 1270 Jogging**

Fall and spring.

Covers running and stretching techniques. It comprises a conditioning program with the objective to develop the capacity to run 3 miles after 12 weeks of training.

**PE 1271 Jogging Tours—Distance Running**

Fall.

Designed for the intermediate runner who can run an average of 3 miles in 30 minutes. Most tours are 3–4 miles long and go through campus and nearby countryside.

**PE 1272 Walking Tours**

Fall and spring.

A series of walking tours around the Cornell campus and beyond.

**PE 1273 Walking Meditation**

Fall and spring.

This course combines walking and meditation, two life enhancing activities that can help students create balance in their hectic lives. Walking is the optimum exercise for optimum health and meditation one the chance to calm an active and busy mind.

**PE 1275 Triathlon**

Fall and spring.

Designed to acquaint students with the components of, and conditioning for, triathlon (running, swimming, and bicycling).

**Equitation Courses****PE 1305 Basic, Intermediate, Advanced**

Fall, spring, and summer (six weeks). Fee charged.

All riding classes are held at the Cornell Equestrian Center located on Pine Tree Road near East Hill Plaza. Detailed information will be offered by the equitation staff at the registration sign-up table. Basic—never ridden; Intermediate I—completed basic with knowledge of walk/trot/canter; Intermediate II—walk/trot/canter with control over two-foot-high jumping course; Advanced—strong jumping/dressage skills with experience hunting/showing/eventing. Students must fill out a release form to participate in any riding class.

**Golf Courses****PE 1320 Golf, Instructional**

Fall and spring. Fee charged. Equipment furnished.

PGA program of instruction geared to all levels of experience and ability. The objective is to give beginners enough skill to play, and to give more advanced players direction in their thinking, practice, and play, through a thorough understanding of fundamentals.

**PE 1321 Golf, Recreational**

Fall and spring. Prerequisite: experienced golfers. Fee covers a semester's membership. Students must provide clubs.

Students must play a minimum of 10 rounds of nine holes to receive credit.

**Gymnastics Courses****PE 1290 Introduction to Gymnastics**

Fall and spring. Open to both male and female participants.

Deals with a majority of the Olympic events. Focuses on beginner-level skills.

**Ice Skating Courses****PE 1540 Introduction to Skating**

Fall and spring. For beginning to intermediate skaters. Fee charged; students provide skates or rent them at Lynah Rink. Covers forward and backward skating, turns, and stops.

**PE 1545-1547 Figure Skating, Beginning, Intermediate, and Advanced Levels**

Fall and spring. Fee charged; students provide skates or rent them at Lynah Rink. Instruction and practice in basic figure-skating techniques: forward, backward, crossovers, turns, and spirals.

**Martial Arts—Self-Defense Courses****PE 1345-1346 Boxing, Introduction to, Intermediate**

Fall and spring. Fee charged.

Covers the basic skills of footwork, defensive, and offensive techniques. Skipping rope, shadow boxing, and heavy bag work are taught as methods for individual aerobic conditioning.

**PE 1350 Chi Gong**

Fall and spring.

Chi Gong, or "the art of breathing," is an ancient Taoist exercise system from China. Like Tai Chi, Chi Gong is an internal martial art that links movement, breathing, and visualization to enhance physical strength and mental clarity. In ancient times, this gentle system was used by warriors preparing for battle. They believed it would make their bodies impervious to weapons of the day. The movements used in Chi Gong are generally less complex than those of Tai Chi and can be learned more quickly. Meditation is an important element of the practice.

**PE 1355 Judo, Introduction to**

Fall and spring. Fee charged.

Conditions and increases suppleness. Continues to develop skills in the two parts of judo: standing techniques (throws and trips) and mat techniques.

**PE 1356 Judo, Intermediate**

Fall and spring. Fee charged.

Conditions and increases suppleness. Continues to develop skills in the two parts of judo: standing techniques (throws and trips) and mat techniques.

**PE 1360 Jeet Kune Do/MMA**

Fall and spring. Fee charged.

Blended system of martial arts. Developed by the late Bruce Lee and taught to his personal apprentice at the time, Dan Inosanto, Jun Fan Gung Fu is the foundation from which Jeet Kune Do eventually evolved. The system emphasizes footwork and agility, economy of motion, counter ability, and strong practical self-defense. This realistic, modern training approach cultivates strong physical, mental, and emotional development in the student.

**PE 1365 Karate, Introduction to**

Fall and spring. Fee charged.

Beginning course taught by professional black-belt instructors. Involves mastery of basic blocks, kicks, and punches.

**PE 1366 Karate, Advanced**

Fall and spring. Fee charged.

Open to those who have taken basic karate or the equivalent.



**PE 1370 Kung Fu**

Fall and spring. Fee charged.  
Explores conditioning and fitness procedures used in the major martial arts, such as karate or judo. Covers circular movement for generating strong blocks, kicks, and punches.

**PE 1375 Tae Kwon Do, Introduction to**

Fall and spring. Fee charged.  
Korean martial art distinguished by emphasis on high and powerful kicks. Basic kicking, punching, and blocking emphasized.

**PE 1376 Tae Kwon Do, Intermediate**

Fall and spring. Fee charged.  
Korean martial art distinguished by its emphasis on high and powerful kicks. Intermediate-level kicking, punching, and blocking are emphasized.

**PE 1380-1381 Tai Chi Chuan, Introduction to, and Intermediate**

Fall and spring. Fee charged.  
Introduction to Tai Chi, a system of graceful exercises that aims at nurturing relaxation, deep breathing, and improved circulation.

**PE 1385 Thai Boxing**

Fall and spring. Fee charged.  
Martial art system developed from the unique culture of Thailand that is a blend of art, science, and sport.

**PE 1390 Self-Defense and Empowerment for Women**

Fall and spring. Fee charged.  
Basic methods of physical protection for women.

**PE 1395 Self-Defense and Personal Safety in the Modern World**

Fall and spring. Fee charged.  
Provides students an opportunity to learn a system of practical, proven self-defense techniques and educates the individual in the strategies of personal safety and awareness.

**PE 1396 Filipino Kali**

Fall and spring. Fee charged.  
A method of increasing your coordination and fitness, keeping both your mind and your body sharp! Kali/Escrima addresses empty hand and kicking, grappling, and tools of the jungle warrior.

**PE 1525 Fencing, Classical**

Fall and spring. Fee charged.  
Martial art that uses the practice of the sword to cultivate self-mastery.

**PE 1526 Renaissance Fencing**

Fall and spring. Prerequisite: Introduction to Fencing or permission of instructor. Fee charged.

Focuses on the fundamental techniques of 16th- to 17th-century fencing with an emphasis on safety, balance, line, focus, and distance.

**PE 1527 Olympic Fencing**

Fall and spring. Fee charged. Equipment furnished.  
Includes warm-up exercises and offensive and defensive moves.

**PE 1528 Olympic Fencing II**

Spring. Prerequisite: Olympic Fencing or equivalent. Fee charged. Equipment furnished.

Interclass competition is stressed.

**PE 1529 Epee de Guerre**

Fall and spring. Fee charged.  
This course focuses on "the most noble weapon" of the Ideal Knight: the "epee de guerre" ("sword of war") also sometimes

called the longsword, the bastard sword, or, most accurately, "the-hand-and-a-half sword" because the weapon was designed to be wielded with equal effectiveness either with one hand or two. Since the practice of the longsword is inextricably linked with the ideals and tenets of chivalry, this beginning level course may include philosophical discussion and reflection as well as techniques, tactics, and strategy.

**Outdoor Education Program**

For further information, class schedules, or to register at any time, call 255-6183 or visit [www.coe.cornell.edu](http://www.coe.cornell.edu).

**Climbing Courses****PE 1640 Basic Rock Climbing**

Fall, spring, and summer. Fee charged.  
Six or 10 indoor climbing sessions at the Lindseth Climbing Wall.

**PE 1642 Women's Basic Rock Climbing**

Fall, spring. Fee charged.  
Six indoor climbing sessions at the Lindseth Climbing Wall taught by and for women.

**PE 1643 High Adventure**

Fall, spring. Fee charged.  
Six sessions combining rappelling, rope traverses, tree climbing, and a 400-foot zipline.

**PE 1644 Basic Outdoor Rock Climbing**

Fall. Fee charged. Includes fall break trip.  
Two indoor classes and a four-day climbing trip to the Shawangunks introduce basic safety, techniques, equipment, and methods for outdoor rock climbing.

**PE 1645 Basic Rock Climbing for 24 and Over**

Fall. Fee charged. Noncredit course.  
Four indoor climbing sessions at the Lindseth Climbing Wall for people age 24 and older.

**PE 1646 Wellness Rock Climbing**

Fall. Fee charged. Noncredit course.  
Nine one-hour climbing sessions at the Lindseth Climbing Wall for Wellness Program members only.

**PE 1650 Performance Rock Climbing**

Fall, spring. Fee charged.  
Six indoor sessions at the Lindseth Climbing Wall that introduce and practice more advanced climbing techniques.

**PE 1651 Introduction to Outdoor Rock Climbing**

Fall, spring. Fee charged.  
One class and a weekend trip to the Shawangunks will introduce you to outdoor climbing and top rope anchor building.

**PE 1652 Shawangunks Rock Climbing**

Fall. Fee charged. Includes fall-break or senior-week trip.  
Two indoor classes and a four-day advanced climbing camp at the Shawangunks introduce advanced climbing techniques and systems for outdoor multi-pitch rock climbing.

**PE 1653 Intro to Traditional Lead Climbing**

Spring. Fee charged.  
Enjoy world-class rock climbing at one of the premier areas in the United States, the Shawangunks. We will travel to the 'Gunks for a three-day rock camp that will teach you the skills to do multi-pitch climbs.

**PE 1654 Ice Climbing**

Spring. Fee charged.  
Basic top-rope ice climbing instruction.

**PE 1657 Tree Climbing**

Fall, spring. Fee charged. All equipment is included in course fee. No experience necessary.

Whether you are a rain forest canopy researcher, an arborist, or just a kid at heart, everyone loves to climb trees. Recall the excitement and your sense of adventure when you first crawled into the branches to look inside a bird's nest. Then you swung from limb to limb without a thought of ropes and harnesses. But what about that big tree down the street you always wanted to climb, but couldn't reach the first branch? Cornell Outdoor Education's Tree Climbing course will teach you how to get up into the canopy of any tree, to move around, even to climb from one tree to another without touching the ground.

**PE 1658 Costa Rica Tree Climbing**

Fall with winter break trip. Fee charged.  
Spend ten days in Costa Rica, traveling to the Rio Guabo valley to explore the canopy of a lowland tropical rainforest. Learn how to use ropes and technical gear to get into the canopy of any tree, to move around, and to climb from one tree to another, 100 feet in the air, without coming back to the ground. Learn some local ecology and experience the culture of a Spanish-speaking rural community. A desire for experiencing a new culture is a must. All equipment is included in the course fee. No climbing experience necessary. Students must provide their own transportation to and from San Jose, Costa Rica.

**Backpacking Courses****PE 1610 Backpacking in the Finger Lakes**

Fall, spring. Free with 100 percent attendance, otherwise fee charged.  
Escape from campus on day outings and weekend trips to explore the glens, forests, waterfalls, vistas, and trails in the local area. This fantastic introduction to backpacking skills covers basic outdoor living skills, including hiking, navigation, camping, equipment selection and use, back-country cooking, and safety. No experience necessary. Fee charged for personal rental equipment.

**PE 1611 Backpacking in the Finger Lakes—Fall Break**

Fall. Fee charged. Includes fall break trip.  
Travel to the heart of the Finger Lakes to learn and practice the skills of outdoor leadership and education. This is an introductory leadership course, focusing on wilderness skills, minimum impact travel, communication, judgement, and decision-making.

**PE 1612 Southwest Backpacking**

Spring. Fee charged. Includes spring break trip.

Spend spring break exploring the wide open spaces of the Southwest. Destination changes year to year. Trip heads to either Utah's stunning and remote Escalante Canyon country or Arizona's Sonoran Desert wilderness of the Superstition Mountains. Visit [www.coe.cornell.edu](http://www.coe.cornell.edu) for trip destination and full details.

**PE 1613 Wilderness Survival Skills**

Fall. Fee charged.

Hands-on course covers principles of survival, shelter building, navigation, fire starting, and water procurement as well as nature observation skills and local natural history. Evening and weekend outings.

**PE 1615 Trekking in Peru**

TBA. Fee charged.

Come to Peru to hike through worlds highest mountains outside of Asia. Pristine high alpine lakes, spring wildflowers, and white glaciers dominate this rugged Andean landscape. The Santa Cruz Trek takes us 50 km beside turquoise glacial lakes and over high mountain passes.

**PE 1616 Introduction to Winter Camping**

Spring. Fee charged. Prerequisite: some backpacking experience; permission of instructor.

Learn the fundamentals of winter travel and camping. Course covers trip planning, equipment selection, snowshoe travel, snow shelter construction, and winter safety.

**PE 1617 Surfing in San Diego**

Spring. Fee charged.

Whether students are catching a wave or spotting dolphins, this class is sure to excite! Students will spend their nights overlooking the ocean from their cliffside campsite and their days catching a wave. Participants will learn the basics of how to surf, ocean safety, and basic outdoor living skills.

**Biking Courses****PE 1664 Mountain Biking**

Fall, spring. Fee charged. Participants provide own mountain bike.

Explore local bike trails and develop off-road riding skills. Course covers essential cycling skills for riding single track, managing steep terrain, and negotiating obstacles, as well as bike repair, riding etiquette, navigation, and outdoor safety.

**Canoeing Courses****PE 1670 Adirondack Canoe Camping**

Fall. Fee charged. Includes fall-break trip.

Learn basic canoeing and wilderness camping skills. Experience the blazing Adirondack autumn foliage as this fall-break trip explores lakes and rivers of upstate New York.

**PE 1671 Recreational Canoeing**

Fall. Fee charged.

Spend afternoons on Beebe Lake learning the art of canoeing. Class culminates in a trip exploring Dryden Lake applying your new-found skills. Course covers equipment, basic paddling techniques, deep water rescues, and considerations for day trips.

**PE 1672 River Canoeing**

Spring. No prerequisites. Fee charged.

Explore local rivers by canoe. Learn skills to safely navigate quick-moving currents and class I to easy class II water. Course covers strokes, braces, eddy turns, peel outs, ferrying, river dynamics, self-rescue, and river safety. Culminates with a weekend river trip.

**Caving Courses****PE 1630 Caving**

Fall, spring. Fee charged.

Learn about the basic safety, techniques, and equipment for caving, finishing with a weekend caving trip.

**Hiking Courses****PE 1602 Outdoors 101**

Spring. Fee charged.

From the gorges of Ithaca, to the lakes of Cornell, this course will give you a taste of it all. This multi-activity class is aimed at the beginner who would like a taste of many different outdoor pursuits. The class will provide an introduction to day hiking, indoor rock climbing, canoeing, and camping.

**PE 1603 Snowshoeing and Winter Travel**

Spring. Fee charged.

Outings in the local state forests build skills and confidence in the winter. Learn winter safety; snowshoe history; equipment selection, care, and use; navigation; and natural history—all while enjoying a great workout.

**PE 1604 Snowshoeing and Winter Travel, for 24 and Over**

Spring. Noncredit course. Fee charged.

Learn basic winter travel and snowshoe skills while exploring some local winter hiking destinations.

**PE 1605 Day Hiking**

Fall, spring. Fee charged.

Hike and explore Ithaca's spectacular gorges, state forests, and extensive trail system. Course covers planning and packing for a hike, dressing for the outdoors, map reading, outdoor safety, navigation, and natural history of the area.

**PE 1606 Outdoor Birding Basics**

Spring. Fee charged (fee waived upon successful completion of course and if needed for PE credit requirement).

Learn to identify and understand the behaviors of the birds in our area. This course is offered as a collaboration of COE and the Lab of Ornithology. Sibley's guide to Eastern Birds is included in the course fee, and optics will be available to use during each outing.

**PE 1607 Back-Country Photography**

Fall, spring. Fee charged. Includes fall break trip. Must have own camera.

Take your photography skills way beyond snapshots in "auto" mode? This fun introduction to camping and outdoor photography includes two pre-trip classes on the basics of photography. Spend Fall Break in the Adirondack wilderness, taking in the beautiful autumn colors. Plan to bring home images as awesome as the trip itself.

**PE 1608 Trail Running**

Fall, spring. Fee charged.

Covers stretching, basic trail-running techniques, navigation, injury prevention, training tips, and a scenic tour of local trails. Develop a training routine, learn to stay found, set running goals. Prerequisite: ability to jog two consecutive miles easily.

**PE 1609 Trail Maintenance**

Fall. Fee charged.

Widen your awareness and appreciation of our gorgeous local backcountry and its network of public trails. Come swing a pulaski and give something back as you learn and implement basic trail construction skills, as well as enjoy leisurely hikes. Possible projects include designing and creating a new trail; switchback construction; building bridges, waterbars and steps, erosion control, and clearing overgrown trails.

**Kayaking Courses****PE 1674 Sea Kayak Touring**

Fall, spring. Fee charged.

Learn basic sea kayaking skills and enjoy a weekend trip to the Adirondacks. Course covers equipment, safety, paddling techniques, rescues, trip planning, navigation, considerations for overnight trips, and camping and travel skills.

**PE 1680 Pool Paddling**

Fall, spring. Free if taken for credit and successful completion of course; otherwise fee charged.

Learn a broad range of kayaking skills in the warm comfort and calm waters of the pool. Course introduces whitewater kayaks, canoes, and sea kayaks, while covering strokes, leans, braces, effective boat-handling skills, kayak Eskimo rolls, and rescues. Pool games, slalom gate courses, and video taping are used to hone an understanding of skills and refine techniques.

**PE 1681 Whitewater Kayaking**

Fall, spring. Prerequisite: ability to swim with comfort in deep water without a flotation aid. Fee charged.

Basic kayaking techniques and equipment use, culminating in a full weekend of whitewater paddling. Pool sessions and local outings develop skills to read water, scout, ferry, brace, power stroke, and execute eddy turns, peel outs, and Eskimo rolls.

**PE 1682 Intermediate Whitewater Kayaking**

Spring. Prerequisites: graduate of a COE whitewater kayak class or equivalent experience, comfortable swimming and self-rescuing in class II water and permission of instructor.

Designed for paddlers with some whitewater experience who are motivated to work on perfecting basic skills as well as developing more advanced techniques. Pool sessions to review the fundamentals. Learn more advanced paddling techniques and concepts, and develop skills by paddling increasingly challenging whitewater (up to class II+) during two day trips.

**PE 1683 1,000 Islands Sea Kayaking**

Fall. Fee charged. Includes fall break trip. International travel documentation to Canada required.

Learn fundamental sea kayak touring skills in the Thousand Islands region of the St. Lawrence River. Course covers equipment, safety, paddling techniques, rescues, trip planning, navigation, considerations for overnight trips, camping, cooking, and travel skills.

**PE 1684 Cayuga Lake Dragon Boating**

Fall. Fee charged.

Get in shape, stay in shape! Get out on the lake without buying your own boat. Paddle with twenty other people in a 40 foot wooden boat with a dragon head and tail! Romance, adventure, and fresh air!

**PE 1685 Kayak Rolling Seminar**

Fall, spring. Noncredit course. Fee charged. Learn kayak rolling techniques in two evening sessions. Classes take place at the Helen Newman pool.

**PE 1686 Introduction to Sea Kayaking Seminar**

Fall, spring. Fee charged. Noncredit course. Class covers equipment, basic paddling techniques, deep water rescues, and considerations for day trips.

**Outdoor Leadership****PE 1619 Introduction to Outdoor Leadership**

Fall. Fee charged.

Take advantage of fall break in the Finger Lakes region to learn and practice the skills of outdoor leadership and education. This is an introductory leadership course, focusing on wilderness skills, minimum impact travel, judgement, and teaching beginners. Ideal for those who aspire to be Outdoor Odyssey Guides, COE instructors, as well as anyone interested in being better prepared to lead friends in the outdoors.

**PE 1618 Outdoor Leadership**

Spring. Prerequisite: backpacking and camping experience; approval of program coordinator. Fee charged. Includes spring break trip.

Learn and practice the skills of outdoor leadership and education. Focus is on refining wilderness skills, outdoor judgment, group facilitation, decision making, and teaching skills. Course culminates in spring-break trip where participants plan and lead portions of the trip.

**Emergency Care Courses****PE 1625 Wilderness First Aid**

Fall, spring. Fee charged.

Full weekend of wilderness first aid. Includes CPR certification.

**PE 1626 Wilderness First Responder**

Fall, spring. Offered over winter break and late May/early June. Fee charged.

Eight days of instruction and practical application of backcountry first aid. Participants earn nationally recognized CPR and Wilderness First Responder certifications. Taught by Wilderness Medical Associates.

**[PE 1627 WFR Recertification**

Spring. Fee charged.

This three-day (24 hour) course is a recertification course open to graduates of ALL wilderness medical training courses of 64 hours or longer with a current certification. Upon successful completion of this course you will receive Wilderness Medical Associates WFR, Anaphylaxis and BLS-level CPR certifications.]

**[PE 1627 CPR for the Professional Rescuer**

Fall, spring. Not for credit.

This American Red Cross class teaches students to respond to breathing and cardiac emergencies in adults, children, and infants; use an AED on an adult or child victim of cardiac arrest; and use personal protective equipment to stop blood-borne pathogens and other diseases from spreading. It is the required level of CPR to keep WFR certification current. Includes ARC certification.]

**[PE 1628 CPR Recertification**

Spring. Not for credit.

The CPR Challenge Class is set up to re-certify at the Professional Rescuer level. Prerequisite is recent CPR training. There is no formal review at the beginning of the class; however, the instructor will answer questions for at least

the first half hour before beginning testing. The assumption is that students come prepared to take the challenge, so it is crucial to have taken a recent CPR class, to check out the textbook from COE, and to review it carefully before class. This class fulfills requirements to keep WFR certification current. Includes American Red Cross certification.]

**Skiing Courses****PE 1690 Cross-Country Skiing**

Spring. Fee charged.

Four sessions learning basic cross-country skiing skills and exploring local forests in winter.

**PE 1693 Basic Telemark Skiing**

Spring. Fee charged.

Four classes at Greek Peak ski area.

**PE 1694 Backcountry Telemark Skiing**

Spring. Fee charged.

A cross between downhill and cross country skiing, telemark involves a graceful free-heel turn that opens up alpine and steep terrain to lightweight backcountry touring gear. We will ski together locally before shifting to our primary classroom in the mountains

**Personal Growth Courses****PE 1400 Body-Mind**

Fall and spring.

Activities are drawn from ancient Eastern practices as well as modern Western psychology, and are designed to give the student first-hand experience of the interaction between their own bodies and minds.

**PE 1401 Well-Being in the Modern World**

Fall and spring. Fee charged.

Teaches students to use the wisdom of the body, movement, and voice. Each class provides an opportunity to increase mindfulness of the present moment. By cultivating openness and respect, students provide the necessary foundation for working with others. Students practice processing and exploring spontaneous experiences of their own and others with precision, gentleness, and curiosity.

**PE 1402 Moving into the Moment**

Fall and spring. Meets twice a week.

We will focus on getting in touch with the power of our own life force. Each class will begin with movement and stretching and end with a meditation exercise designed to reinforce the power of one's own presence.

**PE 1403 Art of Living—Youth Empowerment Seminar**

Fall. Fee charged.

An innovative and dynamic life-skills program that empowers you with tools to eliminate stress, increase energy, handle negative emotions, increase mental focus, heighten awareness, and develop strong social and leadership skills.

**PE 1405 Living Routines**

Fall and spring.

Provides the opportunity to explore a variety of ancient and modern methods designed to bring one to the state of meditation.

**PE 1410 Introduction to Massage**

Fall, spring, and summer. Fee charged.

Provides an experiential introduction to several types of massage. Included are Swedish, shiatsu, polarity, and sports massage. Class members participate in group exercises

and practice on each other during class time. All exercises and techniques can be done while wearing street clothing.

**PE 1411 Shiatsu Massage**

Fall and spring. Fee charged.

Gain an experimental understanding of your body and learn certain shiatsu massage techniques.

**PE 1412 Swedish Massage**

Fall, spring, and summer. Fee charged.

Learn to give a relaxing, stress-reducing Swedish massage. Students master the basic strokes of Swedish massage and learn about their application to the different parts of the body. Students use oils and lotions as a part of their training.

**PE 1413 Swedish Massage II**

Fall and spring. Fee charged.

Students build on skills learned in Swedish massage as they participate in instruction practice sessions every week. Additional massage techniques and applications are added to basic skills. Some techniques from other types of massage are also introduced.

**PE 1414 Thai Massage**

Fall and spring. Fee charged.

Thai massage is a holistic, intuitive style of healing from the East. It encourages the flow of energy through the receiver's body that promotes good health. The person giving Thai massage uses his or her hands and feet supported by body weight to apply pressure along the energy channels that run through the receiver's body.

**PE 1415 Weekend Massage Workshop**

Fall and spring. Fee charged.

This introductory course in massage is taught in an intensive, weekend workshop format. It includes sessions on Friday evening and Saturday and Sunday during the day. Students are introduced to massage skills and techniques and then practice on each other in a structured and supervised format. Basics of touch awareness, palpation skills, and techniques from Swedish and oriental (shiatsu) massage are taught. Students learn to massage the back, shoulders, neck, legs, feet, arms, and hands to reduce stress. Professional massage tables are used.

**PE 1420 Introduction to Meditation**

Fall and spring. Fee charged.

Provides the opportunity to explore a variety of ancient and modern methods designed to bring one to the state of meditation. The methods serve to evoke the deep relaxation from which heightened awareness and creativity arise.

**PE 1421 Relaxation and Stress Management**

Fall and spring.

Introduction to basic relaxation techniques for the reduction of everyday stress. Teaches techniques that can be used in normal everyday living situations.

**PE 1422 Meditation and Relaxation**

Fall and spring. Fee charged.

Designed to assist students in learning to meditate, or to deepen an existing practice. As students learn to practice meditation and relaxation exercises, they find that as little as 15 minutes a day can benefit physical, mental, emotional, and spiritual health.



**PE 1425 The Winning Mindset**

Fall and spring. Fee charged.  
Contains a wealth of knowledge and experience to guide athletes of all levels and abilities to achieve outstanding levels of performance. Students learn the principles to help them achieve success, whether it be tapping inner strength or overcoming the obstacles that limit performance.

**PE 1430 Yoga, Introduction to**

Fall, spring, and summer (six weeks). Fee charged.  
Fundamentals of hatha yoga. Covers basic postures, breathing techniques, and deep relaxation. Introduces chanting.

**PE 1431 Intermediate Yoga**

Fall and spring. Prerequisite: previous yoga experience. Fee charged.  
The course covers more of the fundamentals of Hatha Yoga, including basic postures, breathing techniques, and deep relaxation and chanting techniques.

**PE 1432 Extreme Yoga**

Fall and spring. Prerequisite: membership on a team, participation in daily routine, or minimum of 40 hrs. of yoga practice in past 3 months. Fee charged.  
This class is designed for serious participation only. Advanced warm-up sets, handstands, shoulderstands, spinal twists, and more. You will experience briskly paced transitions from one posture to the next emphasizing form and alignment with attention to the hamstrings to prevent injury.

**Racquet Sports Courses****PE 1440 Badminton, Introduction to**

Fall and spring. Helen Newman Hall.  
Fundamental shots, scoring, and general play.

**PE 1441 Badminton, Intermediate**

Fall and spring. Helen Newman Hall.  
Review of fundamental shots, scoring, and general play.

**PE 1445 Tennis, Introduction to**

Fall, spring, and summer. Fee charged.  
Basic skills taught include forehand, backhand, serve, and volley. Scoring methods taught.

**PE 1446 Tennis, Intermediate**

Fall, spring, and summer. Fee charged.  
Review basic strokes plus topspin and underspin. Doubles strategy emphasized.

**PE 1447 Tennis, Advanced**

Fall, spring. Fee charged.  
Advanced strokes and doubles play emphasized. Recommended for tournament players or those with previous team experience.

**PE 1453 Tennis, Indoor-Recreational**

Fall and spring. Fee charged. Prerequisite: high school or college tournament experience or a rating of 3.5 or higher from USTA. NO BLACK-SOLED SHOES ALLOWED ON COURTS!

Play is conducted at the new Reis Tennis Center. Matches are played in both doubles and singles. Equipment furnished.

**PE 1460 Racquetball, Introduction to**

Fall, spring, and summer. Fee charged; equipment furnished. Protective eyewear required.  
Instruction for beginners.

**PE 1465-1466 Squash, Introduction to, Intermediate**

Fall, spring, and summer. Fee charged.  
Equipment furnished. Protective eyewear required.  
Classes for appropriate level of play.

**Sailing Courses****PE 1335 Water Skiing**

Fall and summer. Fee charged.  
Introductory course for beginning water skiers. Classes are conducted from East Shore Marina.

**PE 1480 Small-Boat Sailing, Introduction to**

Fall, spring, and summer (six weeks). Fee charged.  
Learn basic skills necessary to sail small sailboats and basic keelboats safely.

**PE 1481 Small-Boat Sailing, Competitive**

Fall and spring. Fee includes one-year membership in university sailing team program.  
Vanguard 420 sailboat used for the course. USYRA Rules Book used as a text for the course.

**PE 1482 Introduction to Large-Boat Sailing**

Fall. Fee charged.  
Students learn how to sail on 24- and 26-foot sailboats. Skills learned include sailing terminology, safety and etiquette, boat handling, sail trimming, use of spinnakers, and heavy wind selection and ship systems.

**PE 1483 Recreational Sailing**

Fall. Fee charged.  
A course for those who already know how to sail. Students may go to the sailing facility during the listed times and days and take boats out to sail when they are not being used for instructional sailing. Students must pass knowledge test before they are allowed to take boats out.

**PE 1484 Large-Boat Competitive Sailing**

Fall. Fee charged. Prerequisite: sailing experience.  
This course teaches the basic skills necessary to sail and crew large boats safely and competitively. Twenty-three- to twenty-six-foot sailboats will be used to teach this course. The USYRU rules book will be the text for the course.

**Skiing and Snow Boarding****PE 1330, 1331 Downhill Skiing and Snowboarding**

Spring. Fee charged.  
Transportation, instruction, ski-lift fees, and skiing time are offered in a package deal. Greek Peak and Song Mountain personnel are present at registration to explain the program and accept fees. Bus transportation to Greek Peak is provided six afternoons a week for six weeks.

**Cross-Country Skiing**—See Outdoor Program.

**Target Shooting Courses****PE 1505 Trap and Skeet**

Fall, spring, and summer (six weeks). Fee charged. Guns and shells furnished.  
Includes lectures and shooting at the Tompkins County Rod and Gun Club range.

**PE 1510 Riflery**

Fall and spring. Fee charged.  
Instruction and practice in the techniques of target riflery from various shooting positions.

**PE 1515 Handgun Safety, Introduction to**

Fall, spring, and summer (six weeks). Fee charged.  
Instruction in use of pistol in the three modes of 50-foot competitive target shooting—slow fire, timed fire, and rapid fire. Emphasis on safety and responsibility while firing.

**PE 1520 Archery, Introduction to**

Fall and spring. Fee charged. Two classes a week.  
Instruction in the care of equipment; seven basic steps for shooting; scoring; practice shooting at 20, 30, and 40 yards.

**Team Sports Courses****PE 1550 Ice Hockey, Introduction to**

Fall and spring. Prerequisite: basic skating ability. Fee charged. Students provide own skates and sticks; all other equipment furnished.  
Stick handling, passing, and shooting are stressed. Some scrimmaging.

**PE 1551 Ice Hockey, Intermediate**

Fall and spring. Fee charged. Prerequisite: beginning hockey or previous participation in organized hockey.  
This course is designed for the intermediate hockey player. Advanced techniques taught include positioning, power play, penalty killing, and offensive and defensive attack. Each session emphasizes game situations and scrimmaging. Skates and hockey sticks must be supplied by the participants.

**PE 1560 Basketball**

Fall and spring.  
Fundamental drills in passing, shooting, and dribbling. Scrimmages each class session.

**PE 1565 Soccer**

Fall and spring.  
Introduction to the game. Includes basic individual skills (passing, trapping, shooting) and team play and strategy.

**PE 1570 Volleyball, Beginning/Intermediate**

Fall and spring.  
Fundamentals of ball handling, serves, defensive blocks, and position play are stressed. Classes scrimmage.

**PE 1571 Volleyball, Advanced**

Fall and spring.  
Offensive and defensive team strategy is emphasized in class scrimmages.

**PE 1575 Introduction to Competitive Rowing**

Fall.  
This is an introduction to Division I rowing. Students with no prior rowing experience are accepted and encouraged. The class will involve significant physical activity and students are expected to be in good physical condition. Instruction on the basics of the rowing stroke, use of indoor tanks, ergometers, weight training, stretching, calisthenics and on-the-water work will be part of this class.

## Weight Training Courses

### **PE 1580 Principles of Weight Training**

Fall and spring. Fee charged.

Introduces the proper use of Olympic weights for improving physical condition and muscular strength. Instruction with focus on the relation between high-rep light weight lifting, low-rep heavy lifting, and the development of bulk, strength, and endurance.

### **PE 1581 Weight Training for Women**

Fall and spring. Fee charged.

This class will focus on the basics of weight lifting. Topics will include toning vs. building, theory of program design, training with dumbbells, selectorized equipment, free weight exercises for all muscle groups, flexibility, and proper nutrition for weight training.

## Independent Study

### **PE 1999 Independent Study**

Fall and spring.

Designed for those who have difficulty fitting any of the regularly scheduled courses into their academic program. Class activities are based on personal fitness programs. A term paper is required. Permission to enter this program must be granted by the program director.